## **EXHIBIT PP**

## UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA,

v.

Case No. 19-cr-10080-NMG

DAVID SIDOO, et al.,

Defendants.

## **DECLARATION OF JOHN GARDNER**

## I, John Gardner, declare and state as follows:

- 1. I am a Litigation Manager in BDO's Forensic Investigations and Litigation Services practice located in Houston, Texas. I have more than 21 years of experience working for the Garland Police Department and the FBI's NTRCFL in Dallas, Texas as a certified Computer Analysis Response Team member. I work extensively with organizations, attorneys, law enforcement and federal, state, and local governments, specializing in complex digital forensics and e-discovery from collection through production for matters that involve a range of issues, including intellectual property theft, business technology, copyrights, patents, trademarks, as well as employment, environmental, and numerous other disputes involving digital media and mobile devices.
- 2. There are several versions of forensic hardware and software that allow a forensic analyst to extract and decode iMessages, Facebook Messenger messages, and other data from unlocked iPhones. The most commonly used forensic tool for extracting data from mobile devices is Cellebrite. Cellebrite software allows for the extraction of data from mobile devices, and a program for reviewing the data contained in the extractions. Specifically, Cellebrite's UFED 4PC can recover active iMessages and Facebook Messenger messages contained on an iPhone 7 Plus, and Cellebrite's Physical Analyzer can decode the extracted data.
- 3. The government used the Cellebrite UFED 4PC to extract data from Singer's iPhone 7 Plus on at least nine occasions. The government generated reports from each of these extractions. A review of the data provided by the government reveals that all iMessages that existed on the device before September 27, 2018 were deleted, with the exception of 18 active messages.
- 4. In late 2018 and early 2019, for non-law-enforcement users, Cellebrite supported two types of extractions on an iPhone 7 Plus: a logical extraction and an advanced logical

- extraction. Logical extractions are not as successful in recovering data as a physical extraction.
- 5. During this same time period, the government had access to law enforcement only tools that could obtain more data from iPhones, including the iPhone 7 Plus, than those available commercially. Specifically, the government had access to GrayKey devices and to Cellebrite Advanced Services. Each of these tools allowed the government to perform physical system extractions of an iPhone 7 Plus. Physical system extractions have the capability to extract more data than contained in the types of extractions the government performed (logical and advanced logical). This includes the acquisition of additional data; data which may demonstrate that additional iMessages were deleted.
- 6. These enhanced extraction techniques may recover evidence of additional deleted data, including data deliberately deleted by the phone's user. However, the timing of the extraction is important. Generally, it becomes increasingly difficult to retrieve data from a device as time goes by. With continuous usage of the device, deleted data has a greater likelihood of becoming overwritten or destroyed, and its space reallocated to another database entry or process. When this happens, forensic tools cannot recover the deleted content.
- 7. That the original iPhone 7 Plus is no longer available for inspection is significant. Using current commercially available extraction techniques, it is possible that additional data could be retrieved from Singer's iPhone 7 Plus, which may include additional data regarding the deleted iMessages. Without the original device, these extraction methods are not available.
- 8. The Cellebrite extractions and reports provided by the government show the following activity on the iPhone 7 Plus:
  - a. Approximately 2,244 iMessages that were present on the device prior to September 27, 2018 were deleted.
  - b. Between September 27, 2018 and March 10, 2019, 559 additional iMessages were deleted from the iPhone 7 Plus.
- 9. The above analysis is based on the Cellebrite extractions and reports provided by the government (*i.e.*, the logical images and/or UFDR reports), which were processed using Cellebrite's Physical Analyzer software.
- 10. To further examine the information produced by the government, a de-duplicated data set of deleted messages were exported into an Excel spreadsheet, and filtered to determine the timing of the deletions. It should be noted that an additional 1,658 encrypted chat messages were shown as deleted in a February 15, 2019 report provided by the government. However, based on the format in which this data was provided (i.e., a PDF file), it could not be included in the above analysis. As such, the 1,658 deleted messages identified in that report were not included in the total sum of deleted messages.

- 11. The data contained within the Cellebrite extractions and reports does not contain all data extant on the iPhone 7 Plus at the date of the extraction. As is relevant here, the extractions and reports provided by the government do not necessarily include all iMessages that were present or deleted on the iPhone 7 Plus. It is possible that other deleted messages were deleted on the iPhone 7 Plus but could not be recovered during the extraction process.
- 12. I have reviewed the list of defendants in this case and certain related cases, as well as the government's letter of May 30, 2019 listing co-conspirators. Based on my review of the list of defendants, the government's May 30, 2019 letter, and the extractions, I recovered evidence that Singer deleted iMessages with defendants and co-conspirators.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed on 25<sup>st</sup> day of March, 2020.

John Gardner